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July 12, 2013

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: *In the Matter of Promoting Interoperability in the 700 MHz Commercial Spectrum*, WT Docket No. 12-69

Dear Ms. Dortch:

On Thursday, July 11, 2013, Robert Quinn and the undersigned, of AT&T Services, Inc., met with Michele Ellison and Sarah Whitesell of Chairwoman Clyburn's Office. The purpose of the meeting was to discuss 700 MHz interoperability and the issues set forth in the attached slide presentation.

During the meeting, we emphasized that a regulation forcing AT&T to offer its customers only LTE devices that incorporate Band 12 components that AT&T does not want, cannot use, and that would reduce the quality of AT&T's LTE services, would harm consumers and competition and would have no public interest benefits. The Commission should instead focus on eliminating the interference concerns that have made Band 12 deployments impractical in much of the country. High-power broadcasts from Channel 51 and the E Block create the potential for debilitating interference to Band 12 devices, and a Band 12 mandate would do nothing to eliminate Channel 51 exclusion zones, which impact license areas that cover large portions of the U.S. population and prevent many A Block licensees from deploying at all. There is a broad consensus that the public interest would be served by prompt Commission action to eliminate high-powered Channel 51 and E Block broadcasts. AT&T again committed to work with the Chairwoman's Office and the Commission to find real solutions that fully address the interference problems, appropriately extend A block construction deadlines, pave the way for full and efficient use of all lower 700 Mhz spectrum, and promote market-driven interoperability. AT&T also reiterated its previous commitments in this area, as outlined in the attached letter.

AT&T also explained that regulation mandating Band 12 support would be unlawful. Such a mandate would cause substantial consumer harms, because it would force AT&T to include unnecessary components in all of its devices that would cause

reduced coverage, lower average throughput, reduced battery life, and form factor compromises that AT&T's competitors would not face. Indeed, the mandate would necessitate a redesign of all of AT&T's LTE devices, which would likely result in fewer overall choices for AT&T's customers.

On the other hand, the mandate offers essentially no benefits. It would not promote LTE investment or competition. Nor would the mandate produce truly interoperable devices -- AT&T's devices would be backward-compatible with GSM technology, whereas the A Block licensees that operate wireless networks would need Band 12 devices that are backward-compatible with CDMA.

In accordance with Commission rules, this letter is being filed electronically with your office for inclusion in the public record.

Sincerely,

Joan Marsh

cc: Michele Ellison
Sarah Whitesell

Rethink Possible

LOWER 700 MHZ INTEROPERABILITY

A BAND 12 MANDATE WOULD CAUSE HARM AND WOULD NOT RESOLVE THE UNDERLYING A-BLOCK ISSUES

A BAND 12 MANDATE WOULD CAUSE GREAT HARM AND OFFER NO BENEFIT

- Even assuming AT&T continued to use Band 17, a Band 12 device mandate would harm AT&T customers and competition.
- It would not resolve the interference issues that led to the creation of Band 17. A-block would remain subject to interference and exclusion zones.
- A mandate is unnecessary to create a Band 12 device ecosystem.
- It would be an extraordinary, unprecedented and unlawful regulatory intrusion.

PROBLEMS WITH USING AN ADDITIONAL PORT FOR BAND 12

- Many devices currently support only 2 sub-1GHz ports and AT&T already needs more than that for its existing bands.
  - Band 17 (Lower 700 MHz B & C Blocks)
  - Band 5 (850 MHz)
  - Band 29 (Lower 700 MHz D & E Blocks)
- AT&T will require additional sub-1 GHz ports for future needs – 600 MHz, international LTE roaming.
- Forcing AT&T to use a low-band port for Band 12 would require it to sacrifice another band.
- Adding a port (and filter) AT&T does not need would unnecessarily add to the challenges in board layout and form factor limitations.

PROBLEMS WITH USING SAME PORT FOR BAND 12/17

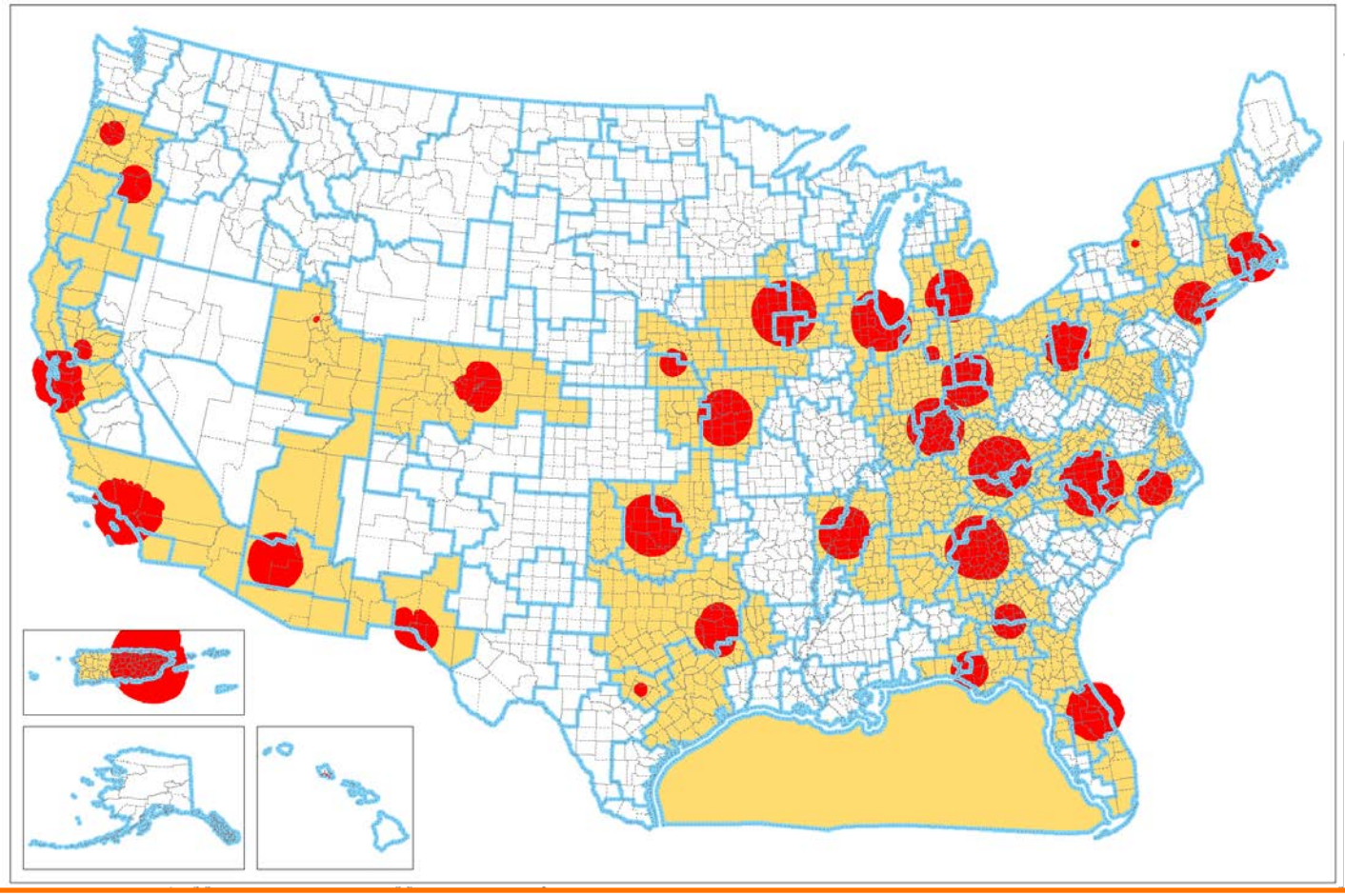
- Requires a switch that is set to either Band 12 or Band 17. No carrier uses such a switch today, and for good reason.
- The addition of such a switch would degrade performance, including:
  - Reduced throughput
  - Reduced coverage
  - Reduced battery life
- Since this approach would require both an additional switch and an additional filter, it would also create more challenges in board layout and form factor limitations.
- A Block licensees previously rejected this approach precisely due to the performance degradation:

"Qualcomm has . . . offered a modified RTR8600 that could support a second 700 MHz band class, as well as the 850 MHz cellular band, by utilizing an external switch. Qualcomm informed A Block licensees, however, that an external switch would degrade performance of the device. Consequently, no Lower A Block operator was interested in this modified RTR8600." (Qualcomm Comments, at 60)

A BAND 12 MANDATE WOULD NOT "FIX" A BLOCK ISSUES

- It would not remove Channel 51 exclusion zones, which would continue to deter A Block deployment.
- It is not needed to ensure availability of Band 12 devices.
- It would not even enable A Block licensees to achieve greater scale in device purchases (even assuming that is a valid basis for the mandate, which it is not).
  - A Block Licensees would not purchase Band 12/17 models designed for use on AT&T's network --no backward compatibility to CDMA/EV-DO.
  - Current Band 12 devices derived from Band 13 LTE models.

EVEN WITH A MANDATE, THE A BLOCK WILL REMAIN SIGNIFICANTLY IMPAIRED



EAs that overlap the CH 51 service areas cover 167M POPs (per the 2000 Census), or 58.6% of total POPs. 64 of those EAs are in the Top 100 EAs.

A BAND 12 MANDATE NOT NEEDED TO DEVELOP BAND 12 DEVICE ECOSYSTEM

- A Band 12 ecosystem already exists:
  - U.S. Cellular already offers ten Band 12 LTE smartphones from four different manufacturers (Samsung, Motorola, Kyocera, and LG) and recently announced that it has "more devices to come throughout the year."
  - U.S. Cellular offered the state-of-the-art Galaxy S4 at the same time as AT&T, Verizon, and T-Mobile.
  - It has been widely reported that U.S. Cellular will also offer a Band 12 version of Motorola's highly anticipated flagship device, the Moto X "XFON" when it is released later this year.
  - U.S. Cellular offers a Band 12 Tablet, a modem, and 2 Mobile Hotspots

BAND 12 MANDATE NOT NEEDED FOR ROAMING

- With broad availability of multi-band LTE chipsets, every operator has many LTE roaming options.
- Many of AT&T's LTE devices, for example, have Band 17 (700 MHz), Band 4 (AWS), Band 2 (Cellular), and Band 5 (PCS).
- AT&T, Verizon, Sprint, T-Mobile, Clearwire and others are all deploying LTE networks in various bands, and A-Block licensees with no LTE device base have maximum flexibility to plan their device portfolios to support roaming on any of those networks.
- Sprint's CEO: "recently conducted . . . LTE roaming trials with C Spire, and that it was working with other operators on similar trials." *See* Dan Meyer, *CCA Spring 2013: Sprint Nextel moves to enable LTE roaming*, RCRWireless, Apr. 18, 2013.
- CCA recently issued an RFP "for organizations interested in hosting the Data Services Hub, and TNS was selected." "The TNS Data Services Hub . . . will provide participating operators the opportunity to connect for services including 4G LTE roaming, Wi-Fi access and interoperability with requisite 3G roaming fallback." *See* Transaction Network Services, Press Release, TNS Delivers Next Generation Data Services Hub Including LTE Roaming Solutions for CCA Members (Mar. 12, 2013)

BAND 12 MANDATE WOULD NOT SPUR NEW LTE DEPLOYMENT

- A block licenses are all held by entities that either: (1) have already deployed LTE networks; or (2) have no wireless network or customers. In many cases, these licensees have monetized their B/C block spectrum holdings in secondary market transactions rather than deploy LTE in either Band 12 or Band 17.

Carrier and MHz/POP percentage of A block licenses owned:

Verizon -- 48%: Has deployed LTE in Band 13 (the upper 700 MHz band) and is currently attempting to sell its A block spectrum.

USCC/King St -- 11%: Has deployed a Band 12 LTE network, which, according to its prior CEO, will cover 90% of its customers by year end. Currently offers ten Band 12 LTE smartphones, as well as LTE tablets and modems, which are derivations of VZ Band 13 phones, not AT&T Band 17 phones.

Cavalier -- 8%: Has no wireless network and no customers. Sold its lower 700 MHz B/C block spectrum on the secondary market.

Cox -- 5%: Shut down its wireless network in 2011. Sold its lower 700 MHz B/C block spectrum on the secondary market.

C-Spire/CellSouth -- 5%: Has deployed LTE on Band 4 (AWS). Is in the process of selling lower 700 MHz B/C block spectrum on the secondary market.

Continuum 700, LLC -- 4%: Has no wireless network and no customers.

Leap/Cricket -- 3%: Currently deploying LTE in Band 4 (AWS). Its lone A block license is in Chicago, which is a CH 51 exclusion zone and Leap is prohibited from building there.

BAND 12 MANDATE WOULD NOT SPUR NEW LTE DEPLOYMENT

Carrier and MHz/POP percentage of A block licenses owned -- continued:

MetroPCS (now T-Mobile) -- 3%: Has deployed LTE in Band 4 (AWS). Has told FCC it cannot use its limited holdings (which are concentrated in Boston/Providence) because of Channel 51 broadcast operator in Providence.

Vulcan -- 2%: An investment company owned by Microsoft founder Paul Allen. It has no wireless network and no customers. Sold its lower 700 MHz B/C block spectrum on the secondary market.

CenturyTel/CenturyLink -- 2%: Has no wireless network and no wireless customers. Sold its lower 700 MHz B/C block spectrum on the secondary market.

McBride -- 1%: Has no wireless network and no customers. Sold its lower 700 MHz B/C block spectrum on the secondary market.

Triad 700, LLC -- 1%: Has no wireless network and no customers. Sold its lower 700 MHz B and C block spectrum on the secondary market.

Frontier -- 1%: Has no wireless network.

David Miller -- 1%: Has no wireless network and no customers. Sold its lower 700 MHz B/C block spectrum on the secondary market.

Remaining 4% fragmented among 19 license holders.

THE PROPOSED MANDATE WOULD BE UNLAWFUL

- The Commission has no authority over device makers and can issue regulations affecting devices only to the extent that those devices are actually used in a transmission. *American Lib. Ass'n* v. *FCC,* 406 F.3d 689, 703 (D.C. Cir. 2005) ("at most, the Commission only has general authority [under the Act] to regulate apparatus used for the receipt of radio or wire communication while those apparatus are engaged in communication").
- Accordingly, as many recent cases have confirmed, the Commission must identify a specific grant of authority in Title III that would authorize the proposed mandate and there is none.
- Section 303(b), which was the basis for the Commission's data roaming rules, cannot support a Band 12 mandate, because a rule requiring components that will not be used cannot be characterized as prescribing the "nature" of any licensee's service.
- Nor can the Commission rely on Section 316, because (1) a Band 12 mandate would fundamentally change the terms of the license, *Community Television, Inc.* v. *FCC*, 216 F.3d 1133, 1140-41 (2000), and (2) any "public interest" benefits of such a modification are extremely speculative at best and likely nonexistent, given that: (i) a robust Band 12 device ecosystem already exists, (ii) device makers have no duty to deal with any provider, and A Block providers would need CDMA fallback and still face Channel 51 exclusion zone and E Block interference obstacles.
- The D.C. Circuit has made clear that Sections 301 and 303(r) are not independent grants of authority. *Comcast Corp.* v. *FCC*, 600 F.3d 642, 652-54 (D.C. Cir. 2010); *Motion Picture Ass'n of Am., Inc.* v. *FCC*, 309 F.3d 796, 806 (D.C. Cir. 2002).

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December 22, 2011

VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Applications of AT&T Mobility Spectrum LLC and Qualcomm Incorporated for Consent to the Assignment of Licenses*,
WT Docket No. 11-18
NOTICE OF EX PARTE PRESENTATION

Dear Ms. Dortch,

The interference challenges into the 700 MHz Lower A block are significant. The high power broadcasts currently permitted in Channel 51 and in the 700 MHz Lower E block create the potential for significant interference problems for LTE deployments in the adjacent A block. Indeed, Band Class 17 was created in the 3GPP standards-setting process specifically to address these interference issues. AT&T agrees that these challenges can and should be addressed.

AT&T further agrees that, if the interference challenges described above are addressed to AT&T's satisfaction, AT&T will not object, assuming supply chain availability, to supporting interoperability in the paired spectrum in the Lower 700 MHz band no more than two years after the later of the effective date of new rules relieving the Lower A block of the interference concerns, the end date of any transitional operating period that is allowed for any spectrum uses that create Lower A block interference concerns or the date when any existing broadcast uses are relocated from Channel 51 and the E block (provided further that Lower 700 MHz licensees are not responsible for the costs of any such relocations). AT&T will consider a shorter transition period if, in AT&T's view, it is commercially feasible.

To fully address the interference challenges, AT&T believes that the Commission must, at a minimum, modify the rules governing service in Channel 51 and in the 700 MHz Lower E block to permit power levels, out of band emissions and antenna heights that are no greater than those currently permitted in the 700 MHz Lower A and B blocks, to allow downlink only in the Lower E block and uplink only in Channel 51, and to relocate any incumbent high power broadcast operations out of Channel 51 and the

Lower E block. Indeed, to address interference concerns into the 700 MHz Lower C block, the Commission is proposing similar limitations on AT&T's use of the Lower D and E blocks in the draft Order currently pending in this proceeding. AT&T reserves the right to offer additional guidance in any rulemaking that may be initiated on these issues.

In all events, AT&T reserves the right, in its sole discretion, to plan and manage Lower 700 MHz interoperability support in a manner that will not disrupt existing services, strand existing devices or result in unnecessary cost or delay. AT&T explicitly reserves the right to continue to support Band Class 17 at its sole discretion.

In accordance with Commission rules, this letter is being filed electronically with your office for inclusion in the public record.

Sincerely,

Joan Marsh

cc: Louis Peraertz, Esq.
Rick Kaplan, Esq.
Best Copy and Printing, Inc.
Kathy Harris, Esq.
Ms. Kate Matraves
Jim Bird, Esq.